

## REMARKS

Claims 1-10 are pending, with claim 1 being independent. No changes have been made to the application in this paper.

### Applicants' Statement of Substance of Interview

The applicants and their representatives would like to express their appreciation to Examiner Nathan E. Price and Primary Examiner Li B. Zhen for the courtesy of the personal interview conducted on September 17, 2008, between Messrs. Price and Zhen and the undersigned attorney, Randall S. Svihla. At the end of the interview, Mr. Zhen gave the attorney an Interview Summary for the interview stating as follows:

Claim(s) discussed: 1,2 and 10

Identification of prior art discussed: Sullivan

Substance of Interview: Clarified [sic] the 35 USC 101 rejection. Applicant's representative will respond to the 35 USC 101 [rejection] regarding to [sic] the data structure recited in claim 1. Applicant's representative also argued that Sullivan does not disclose buffering the markup document.

The applicants' statement of the substance of the interview required by the Interview Summary and MPEP 713.04 is provided below.

During the interview, the attorney went over all of the arguments presented in the Request for Reconsideration After Final Rejection of September 2, 2008, except for the arguments with respect to claim 8 on page 15, and presented additional arguments as discussed below. Further additional arguments are also presented below.

### Claim Rejections Under 35 USC 101

Claims 1-10 have been rejected under 35 USC 101 as being directed to non-statutory subject matter, with the Examiner setting forth two different bases for the rejection. This rejection is respectfully traversed.

First Basis for Rejection Under 35 USC 101

The first basis for the rejection under 35 USC 101 is the Examiner's allegation that "[t]he computer-readable medium of claim 1 appears to store only nonfunctional descriptive material."

During the interview, the attorney pointed out that it is not clear whether the first basis for the rejection applies only to independent claim 1, or also applies to claims 2-10 depending from claim 1. Mr. Price said that the first basis for the rejection does not apply to claim 2 because claim 2 recites "an application program interface (API) that generates a report signal," and thus recites functionality. Mr. Price said that he will clarify which of claims 1-10 the first basis for the rejection applies to in his response to the Request for Reconsideration After Final Rejection of September 2, 2008.

The attorney pointed out that the first basis for the rejection appears to be based on the Examiner's position set forth in paragraph 4 on pages 2 and 3 of the Final Office Action of July 2, 2008, that claim 1 does not recite functional descriptive material because it does not appear to recite a computer program. The attorney pointed out that claim 1 recites a data structure, and MPEP 2106.01 states that a data structure is functional descriptive material and is statutory when recorded on some computer-readable medium.

Mr. Zhen showed the attorney a copy of MPEP 2106.01 and pointed out the statement that says " 'functional descriptive material' consists of data structures and computer programs which impart functionality when employed as a computer component." Mr. Zhen said that, in his opinion, this means that a data structure without a computer program is not functional descriptive material.

The attorney pointed out the portion of MPEP 2106.01 that discusses *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994) and describes *Lowry* as "discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency." The attorney pointed out that this means that a data structure without a computer program is in fact functional descriptive material.

Mr. Zhen pointed out the statement in MPEP 2106.01 that states "[t]he definition of 'data structure' is 'a physical or logical relationship among data elements, designed to support specific

data manipulation function,' " and asked the attorney to explain how claim 1 meets this definition.

The attorney explained that claim 1 recites a data structure comprising the data elements of audio video (AV) data, a markup document, and control information, and recites a logical relationship between these elements designed to support specific data manipulation functions by reciting "a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus," and "control information to enable the apparatus to identify buffering state information of the markup document to be preloaded into the buffer of the apparatus, the buffering state information being used by the apparatus in reproducing the AV data in the interactive mode selected by the user."

Mr. Zhen asked the attorney to explain the nature of the control information recited in claim 1, and whether the control information is a computer program.

The attorney explained that the nature of the control information is exactly as recited in claim 1, i.e., that the control information enables the apparatus to identify buffering state information of the markup document to be preloaded into the buffer of the apparatus.

Mr. Zhen said it is still not clear to him whether the control information is a computer program, and asked the attorney to clarify this in a supplemental response.

Upon further review of this matter, it is submitted that the nature of the control information recited in claim 1 is irrelevant to whether or not claim 1 recites functional descriptive material because claim 1 meets the definition of a data structure set forth in MPEP 2106. 01 for the at least the reasons discussed above and thus recites functional descriptive material.

However, it is noted that claims 2-7 depending from claim 1 recites that the control information recited in claim 1 includes various application program interfaces (APIs) that provide various functionality, such that the control information recited in claim 1 may be considered to be a computer program that enables the apparatus to identify buffering state information of the markup document to be preloaded into the buffer of the apparatus, in which case claim 1 recites functional descriptive material because it recites a computer program.

For at least the foregoing reasons and the reasons discussed on pages 5-9 of the Request for Reconsideration After Final Rejection of September 2, 2008, it is submitted that

claim 1 and claims 2-10 depending therefrom recite functional descriptive material recorded on a computer-readable medium, and are therefore statutory under 35 USC 101.

#### Second Basis for Rejection Under 35 USC 101

The second basis for the rejection under 35 USC 101 is the Examiner's position as set forth in paragraph 5 on page 3 of the Final Office Action of July 2, 2008, which reads as follows:

Regarding Applicant's amendment to the specification, although Applicant indicates the amendment addresses the rejection under 35 USC 101, Applicant has not specifically disavowed the disclosure that precedes the amendment. Additionally, the amendment removes carrier wave from the examples of storage media, but it is not clear that carrier wave is not disclosed as an example of a computer readable medium.

During the interview, the attorney said that he does not understand the Examiner's position because paragraph [0095] of the specification was amended in the Amendment of April 10, 2008, to delete a carrier wave medium from the examples of permanent or removable storage, such that there is no longer any basis for the Examiner to interpret the "computer-readable medium" recited in independent claim 1 as covering a carrier wave, which the U.S. Patent and Trademark Office currently considers to be nonstatutory as being a form of energy.

Messrs. Price and Zhen explained that their position is based on discussions with a TQAS (Training Quality Assurance Specialist) in Technology Center 2100 whom they did not identify. Their theory is that since the application as originally filed disclosed a carrier wave as an example of permanent or removable storage, merely amending the specification to delete a carrier wave from the examples of permanent or removable storage does not negate the inclusion of a carrier wave in the examples in the original disclosure. Messrs. Price and Zhen said that the applicants need to make a positive statement that the "computer-readable medium" recited in claim 1 does not cover a carrier wave in order to overcome the rejection.

The attorney explained that a carrier wave was included in the examples of permanent or removable storage in paragraph [0095] of the specification as originally filed based on the following example of a statutory claim that was provided by the U.S. Patent and Trademark Office in the 1996 Training Guidelines for the 1996 Examination Guidelines for Computer-Related Inventions:

A computer data signal embodied in a carrier wave comprising a compression source code segment comprising [the code]; and an encryption source code segment comprising [the code].

The attorney explained that the U.S. Patent and Trademark Office changed its position in the 2005 Interim Guidelines for Examination of Patent Applications for Subject Matter Eligibility that were issued after the present application was filed on October 16, 2003, and suggested that such a claim appears not to be statutory.

The attorney pointed out that the Examiner's position that claim 1 is nonstatutory because it covers a carrier wave appears to be based on the decision of *In re Nuijten*, 500 F.3d 1346, 84 USPQ2d 1495 (Fed. Cir. 2007), which is a split decision of a three-judge panel of the Court of Appeals for the Federal Circuit decided on September 20, 2007, after the Amendment of September 5, 2007, was filed, and held that Nuijten's signal claims are not patentable subject matter under 35 USC 101. The attorney pointed out that the law is hardly settled on this issue, and it is unlikely that *Nuijten* will be the last word on this issue.

However, under the current state of the law as set forth in *Nuijten*, a carrier wave would appear to be nonstatutory subject matter. Accordingly, under the current state of the law as set forth in *Nuijten*, the applicants do not intend for the "computer-readable medium" recited in claim 1 to cover a carrier wave.

However, should the state of the law change and a carrier wave become statutory subject matter in the future, for example, due to a change in 35 USC 101 enacted by Congress, or a unanimous decision of a three-judge panel of the Federal Circuit, or an *en banc* decision of the Federal Circuit, or a decision of the U.S. Supreme Court, the applicants intend that the "computer-readable medium" recited in claim 1 cover a carrier wave under such future state of the law.

For at least the foregoing reasons and the reasons discussed on pages 9 and 10 of the Request for Reconsideration After Final Rejection of September 2, 2008, it is submitted that the "computer-readable medium" recited in claim 1 does not cover a carrier wave under the current state of the law as set forth in *Nuijten*, such that claim 1 and claims 2-10 depending therefrom are therefore statutory under 35 USC 101.

Conclusion—Claim Rejections Under 35 USC 101

For at least the foregoing reasons and the reasons discussed on pages 5-10 of the Request for Reconsideration After Final Rejection of September 2, 2008, it is respectfully requested that the rejection of claims 1-10 under 35 USC 101 be withdrawn.

However, should the Examiner refuse to withdraw the rejection because a TQAS in Technology Center 2100 has required the Examiner to maintain the rejection, it is respectfully requested that the Examiner provide the name of the TQAS in the next Office Action, even if that Office Action is an Advisory Action.

Claim Rejections Under 35 USC 102 and 103

Claims 1, 2, 5, and 8-10 have been rejected under 35 USC 102(b) as being anticipated by Sullivan et al. (Sullivan) ("Programming with the Java Media Framework").

Claims 3, 4, 6, and 7 have been rejected under 35 USC 103(a) as being unpatentable over Sullivan.

These rejections are respectfully traversed.

Claims 1 and 10

During the interview, the attorney presented new arguments pointing out that Sullivan does not disclose or suggest "a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus" or "control information to enable the apparatus to identify buffering state information of the markup document to be preloaded into the buffer of the apparatus, the buffering state information being used by the apparatus in reproducing the AV data in the interactive mode selected by the user" as recited in independent claim 1.

Specifically, the Examiner discussed the following portions of Sullivan. Page 29 ¶1 of Sullivan states that "[t]he purpose of the Java Media Player API is to control and present time-based media streams." Page 33 ¶2 of Sullivan states that "[t]he CachingControl object monitors the Player's progress in downloading media data." Page 34 ¶3 of Sullivan states that "[i]t is assumed that Players are implementations for streams that have audio and visual renderers,"

and that "[t]he Player interface provides methods for view and controlling the audio and video clips." Page 75 ¶1 of Sullivan states that "[y]ou can enhance a website by adding audio and video to the web pages." Page 77 ¶2 of Sullivan states that "[t]he applet can play back any file type that is supported by the Java Media Framework runtime;" that "[t]o play an AVI file, simply set the applet's filename parameter to *yourfile.avi*;" and that "[t]o play an MPEG-1 file, set the filename parameter to *yourfile.mpg*." Page 82 ¶2 of Sullivan states that "[t]he Java Media Framework makes it easy to build multimedia Java applets;" that "[t]he VideoApplet can be used to enhance web pages with video;" that "[t]he ScriptableMediaApplet is an example of how applets can be combined with JavaScript on a web page;" and that "[t]he JarAudioApplet efficiently adds background music to web pages." Page 95 ¶1 of Sullivan states that "[t]he process can include all of the following tasks: thread creation, memory buffer allocation, loading data into buffers, acquisition of system-dependent resources, connection to a remote server, and download of media data from the network;" that "the download of media data is usually the most time consuming;" and that "[t]he Java Media Player API was designed so that the download of the media data occurs asynchronously." Page 95 ¶2 of Sullivan relied on by the Examiner, which includes the heading "Media Data Download Event Notification," states that "[o]bjects that need to track the progress of the data download should implement the ControllerListener interface to receive notification of caching state changes," and that "[t]he Player notifies all registered listeners of caching state changes by sending a CachingControlEvent." Page 95 ¶3 and page 96 ¶1-4 of Sullivan states that "[t]he CachingControl provides information about the progress of the media data download," and that "[a] CachingControl has five methods: . . . **isDownloading** returns a boolean value which indicates if the media data is being downloaded; **getContentLength** returns the total number of bytes in the media being downloaded . . . **getContentProgress** . . . **getProgressBarComponent** . . . **getControlComponent** . . ."

Page 100 last ¶ of Sullivan states that "[m]edia data download is a time-consuming process;" that "[m]edia files can be very large, which means that the user may have to wait before a file is ready to play;" and that "[t]hrough the use of the CachingControl and the progress bar, an application can provide feedback to the end user." Page 177 last ¶ of Sullivan states that "[w]hen the Player posts a PrefetchCompleteEvent, it indicates that the Player has reached the prefetched state," and that "[i]n response to the event, the applet calls Player.start to start media playback."

The attorney pointed out that it is readily apparent from the above portions of Sullivan that Sullivan relates to downloading and playing back audio and video data, like the "audio video (AV) data" recited in claim 1. Furthermore, the attorney pointed out that although these portions of Sullivan may be considered to disclose AV data to be preloaded into a buffer of an apparatus, and control information to enable the apparatus to identify buffering state information of the AV data to be preloaded into the buffer of the apparatus, nothing whatsoever in these portions of Sullivan or any other portion of Sullivan discloses or suggests "a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus" or "control information to enable the apparatus to identify buffering state information of the markup document to be preloaded into the buffer of the apparatus, the buffering state information being used by the apparatus in reproducing the AV data in the interactive mode selected by the user" as recited in claim 1.

The attorney asked Mr. Price to point out where Mr. Price considers Sullivan to disclose "a markup document" as recited in claim 1. Mr. Price explained that he considers the source code that displays the web page shown in FIG. 9.2 on page 79 of Sullivan in which a video file is displayed in a window on the web page to be "a markup document" as recited in claim 1, and that he considers the video file to be part of the markup document.

The attorney pointed out that claim 1 recites both "audio video (AV) data" and "a markup document to be preloaded into the buffer of the apparatus," and that in light of this, the Examiner cannot interpret the video file that is displayed in FIG. 9.2 of Sullivan as being part of a markup document that generates the display in FIG. 9.2, but must interpret the video file as corresponding to the "audio video (AV) data" recited in claim 1 because there is nothing else in FIG. 9.2 that can reasonably be considered to correspond thereto, and must interpret the rest of the source code that generates the display in FIG. 2 as corresponding to the "markup document" recited in claim 1. The attorney pointed out that although Sullivan may be considered to disclose buffering the video file that is displayed in FIG. 9.2, nothing whatsoever in Sullivan discloses or suggests buffering the rest of the source code, i.e., the markup document, that generates the display in FIG. 9.2 because Sullivan only discusses buffering audio and video data. Accordingly, the attorney said that Sullivan does not disclose or suggest "a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus" or "control information to enable the apparatus to identify buffering state information of the markup document to be preloaded into the



buffer of the apparatus, the buffering state information being used by the apparatus in reproducing the AV data in the interactive mode selected by the user" as recited in claim 1.

Mr. Price said that he would take another look at the rejection of claim 1 as being anticipated by Sullivan in light of the above arguments. The attorney said he would file a supplemental response presenting these arguments.

The attorney briefly went over the arguments on pages 11-17 of the Request for Reconsideration After Final Rejection of September 2, 2008, pointing out that Sullivan does not disclose the following feature of independent claim 1:

a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus,

or disclose or suggest the following features of dependent claim 10:

the interactive mode is a mode in which the AV data is displayed in a display window defined by the markup document;

the apparatus is selectively operable in the interactive mode in which the AV data is displayed in the display window defined by the markup document, and a non-interactive video mode in which the AV data is displayed in the same manner as AV data recorded on a standard DVD; and

the user of the apparatus selects between the interactive mode and the non-interactive video mode.

The attorney pointed out that the Examiner considers FIG. 9.1 on page 77 of Sullivan to show a "non-interactive video mode" as recited in claim 10, and considers FIG. 9.2 on page 79 of Sullivan to disclose an "interactive mode" as recited in claims 1 and 10. However, the attorney pointed out that these portions of Sullivan merely teach a programmer to add a video to a web page using VideoApplet as shown in FIG. 9.1, or ScriptableMediaApplet as shown in FIG. 9.2, but do not teach the programmer how to give a user the option to select between the two modes, such that Sullivan does not disclose "an interactive mode selected by a user of the apparatus" as recited in claim 1, or disclose or suggest the feature "the user of the apparatus selects between the interactive mode and the non-interactive video mode" recited in claim 10.

Mr. Price showed the attorney his copy of Sullivan, which is a book, and showed the attorney a disk that came with Sullivan. Mr. Price said that all of the examples in the book are on the disk, so that if he were to put the disk in a computer, he would be able to select to view the

example in FIG. 9.1, which he considers to be the non-interactive video mode, or the example in FIG. 9.2, which he considers to be an interactive mode, such that the disk provides "an interactive mode selected by a user of the apparatus" as recited in claim 1, and the feature "the user of the apparatus selects between the interactive mode and the non-interactive video mode" recited in claim 10. However, Mr. Price did not actually demonstrate this during the interview.

The attorney said that he considers this interpretation by Mr. Price to be unreasonable.

Also, since Mr. Price did not actually demonstrate Sullivan's disk during the interview, the applicants do not concede that Sullivan's disk would actually function as alleged by the Examiner if Sullivan's disk were inserted into a computer.

Furthermore, the Examiner has not rejected claims 1-10 based on Sullivan's disk that came with Sullivan's book, but has rejected claims 1-10 based on the text of Sullivan's book. It is submitted that rejecting claims 1-10 based on Sullivan's disk would be a new ground of rejection that would require the Examiner to withdraw the finality of the Final Office Action of July 2, 2008, and reopen prosecution. Furthermore, Sullivan's disk is not of record in the present application. Accordingly, should the Examiner decide to set forth a new ground of rejection of claims 1-10 based on Sullivan's disk in the next Office Action, it is respectfully requested that the Examiner provide a copy of Sullivan's disk with the next Office Action.

In the meantime, for at least the foregoing reasons and the reasons discussed on pages 11-15 and 16-17 of the Request for Reconsideration After Final Rejection of July 2, 2008, it is submitted that Sullivan does not disclose or suggest "an interactive mode selected by a user of the apparatus" as recited in claim 1, or disclose or suggest the feature "the user of the apparatus selects between the interactive mode and the non-interactive video mode" recited in claim 10.

#### Claim 8

Dependent claim 8 was not discussed during the interview. The following arguments with respect to claim 8 were presented on page 15 of the Request for Reconsideration After Final Rejection of July 2, 2008.

It is submitted that Sullivan does not disclose the following feature of dependent claim 8:

wherein the AV data is selectable by the user to be viewed by the user while the AV data is reproduced in the interactive mode selected by the user.

The Examiner states as follows on page 6 of the Final Office Action of July 2, 2008:

As to claim 8, Sullivan teaches the AV data is selectable by the user to be viewed by the user while the AV data is reproduced in the interactive mode selected by the user (p. 78 ¶ 2 – 3; p. 79 ¶ 1 – 3; Fig. 9.2).

Pages 78 and 79 of Sullivan teach a programmer how to add video to a web page using ScriptableMediaApplet, and how to display a VCR control panel or HTML FORM buttons to stop and start the video on the web page to enable a user to control playback of the video. The Examiner apparently considers this video to be "AV data" as recited in claim 8. However, it is submitted that the video is not "selectable by the user" as recited in claim 8 because the video was selected by the programmer and will always appear when the user opens the web page. It is submitted that something that is always present cannot be "selectable" as recited in claim 8 because the ordinary meaning of "selectable" implies a choice, and there is no choice when something is always present.

The following additional arguments with respect to claim 8 are now presented.

FIG. 9.2 on page 79 of Sullivan relied on by the Examiner shows a video obtained by playing a video file "example.avi" listed in the source code segment at the bottom of page 78 of Sullivan relied on by the Examiner. However, it is submitted that pages 78 and 79 do not teach a programmer how to make the video file "selectable by the user to be viewed by the user while the AV data is reproduced in the interactive mode selected by the user" as recited in claim 8. If the user opens a web page containing the video file "example.avi," for example, by inserting Sullivan's disk discussed above into a computer and selecting the example shown in FIG. 9.2, the video file "example.avi" is the only video file that can be reproduced in the alleged interactive mode shown in FIG. 9.2, regardless of whether the user would like to select another video file to be viewed.

For at least the foregoing reasons and the reasons discussed on page 15 of the Request for Reconsideration After Final Rejection of July 2, 2008, it is submitted that Sullivan does not disclose the feature "wherein the AV data is selectable by the user to be viewed by the user while the AV data is reproduced in the interactive mode selected by the user" recited in claim 8.

Conclusion—Claim Rejections Under 35 USC 102 and 103

For at least the foregoing reasons and the reasons discussed on pages 11-17 of the Request for Reconsideration After Final Rejection of July 2, 2008, it is respectfully requested that the rejection of claims 1, 2, 5, and 8-10 (i.e., claims 1, 8, and 10 discussed above and claims 2, 5, and 9 depending from claim 1) under 35 USC 102(b) as being anticipated by Sullivan be withdrawn, and that the rejection of claims 3, 4, 6, and 7 depending directly or indirectly from claim 1 discussed above under 35 USC 103(a) as being unpatentable over Sullivan be withdrawn.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with the filing of this paper, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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Date: 09/19/08

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